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Florida Agricultural Experiment Station.

ROSELLE MILDEW.

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Roselle or Jamaica Sorrel (Hibiscus Sabdariffa) was severely attacked last year by Mildew. It was noticed about the first of November. Those who have planted roselle this year should keep on the lookout for it. The mildew is characterized as follows: The leaves, petioles, stems and sometimes the entire plant assume a white powdery appearance as if they had been lightly dusted over with flour or lime. The appearance comes on quite suddenly. It usually follows the cool, moist nights that are likely to occur about this time of the year. The vitality of the plant is probably weakened by the drop in temperature, and this renders it more susceptible to the attack of the mildew. Leaves attacked by the mildew soon begin to look unhealthy, and turn slightly yellow.

CAUSE OF THE MILDEW.

This disease is caused by a white mould-like fungus, known scientifically as a species of *Microsphaera*. By means of a hand lens one can observe a network of very minute white mycelial threads on which there are borne upright chains of small spherical spores. These spores may be carried by the wind or insects from one plant to another, and in this way spread the disease rapidly to great distances in a short time. In the course of several weeks if the fungus is not killed, the powdery appearance disappears, and on the threads are seen minute black specks. These contain the spores that are able, like seeds, to live through the winter months and reproduce the mildew the following year.

TREATMENT.

The treatment recommended for this disease is to spray the plants as soon as the white appearance is noticed with potassium sulphide (liver of sulphur), using one ounce to two gallons of water. Dissolve

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the potassium sulphide in water just before using, and in case any of the solution is to be kept for later spraying, put it in a tightly corked glass bottle. As an additional preventive for the following year all dead plants should be burned up after the fruit is picked, in order to kill the resistant spores that would otherwise live over winter on the dead leaves and stems and infest the next year's crop.

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